





# MEDICINE AND QUACKERY.

*An Address Introductory to the Second Course  
of Clinical Medicine, delivered at  
Leith Hospital.*

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## MEDICINE AND QUACKERY.<sup>1</sup>

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STUDENTS OF MEDICINE.—A year ago, in this Hospital I first addressed you. On that occasion, as you had met here to begin your first course of clinical medicine, I chose for my theme “The Uses and Methods of Clinical Instruction.” In that prelection I tried to show you the importance of a knowledge of clinical work, and during the past year I have with the aid of my colleagues of the staff endeavoured to impart to you something of that knowledge. Remembering these facts, and knowing that your work here is but barely begun, I might have contented myself now with telling you in other words what I told you a twelvemonth ago. But while in effect giving this recapitulation, I mean to-day to sketch to you very briefly the condition of our art in former times. For in doing this I can tell you something of charlatanry in medicine, and give you thereby a caution against the abuse of that knowledge which you have already acquired.

The history of the early days of the healing art is now exceedingly misty, as from the nature of things it might be expected to be. But partly from the direct statements of ancient authors, and partly from occasional references in their writings, we may build up some beliefs on the subject. From these it would appear that the practice of medicine was a late art. Nor was it in any nation, so far as I know, followed in the first instance as a separate calling. Among all ancient peoples (as among the semi-civilized of to-day) the functions of the doctor were associated with those of the priest or king—mostly with those of the priest. But in a state of semi-barbarity the work of the healer would naturally be neglected in favour of the more important rôle of the vates, or civil ruler. Thus medicine would languish unless perhaps when some man of mark was sick. Yet even in that case the prophet and diviner would possibly be in as much request as the physician. Of this, indeed, Herodotus (Book iv. c. 68) gives us an illustration in the procedure adopted during the illness of the Scythian king. Who then the first quack was, and what he said, and what he did, are

<sup>1</sup> A lecture delivered at Leith Hospital on 16th October 1888, as introductory to the second course of Clinical Medicine in connexion with the Edinburgh School of Medicine for Women.

matters not easy to determine. They are written of in no chronicle extant. Nor can we imagine that they have found or shall ever find an historian; for from what we know of it the practice of medicine in these early days must have been very primitive indeed. And as even in the hands of the orthodox, medicine was wonderfully halting and impotent, we must be slow to regard any single man of old as more of a charlatan than his neighbour. But to our history.

THE ASSYRIANS, we learn, had no regular medical faculty. Yet they must have had some acquaintance with sanitary science. For Sennacherib, in detailing his improvements at Nineveh, tells us on one of his inscriptions:—"As to caring for the health of the city by bringing streams of water into it, and the finding of new springs, none (of the kings my fathers who went before me) turned his thoughts to it, nor brought his heart to it. Then I, Sennacherib, king of Assyria, by command of the gods, resolved in my mind to complete this work, and I brought my heart to it. . . . . By my care I caused the uprising of springs in more than forty places in the plain. . . . . I brought down the perennial water of the river Kutzuru from the distance of half a kasbu ( $3\frac{1}{2}$  miles) into reservoirs, and I covered them well. . . . . Of Nineveh, my royal city, I greatly enlarged the dwellings. Its streets, I renovated the old ones, and I widened those which were too narrow. I made them as splendid as the sun."—(From Bellino's Cylinder in *Records of the Past*.)

From which it will be seen that the mighty Assyrian was a devout man according to his lights, and furthermore recognised the benefits of an ample water supply. This water question must have always been an urgent one to Easterns. The ancient Persians, we learn, were specially careful of the purity of their rivers (Herodotus, Book i. c. 138). And the Moabite stone, which contains the oldest specimen of alphabet writing in the world, tells us in king Mesha's words, after his description of the building of Karkha (believed to be the Sion of Dibon, the Moabite Jerusalem), "And there was not a cistern inside the city in Karkha. Then I spoke to all the people:—Make each a cistern in your houses" (Ragozin's *Assyria*, p. 216). In the case of Sennacherib, this water question may possibly enough have been pointedly brought home to him by the results of his disastrous campaign against Judah. For at the instance of the good king Hezekiah, "there were gathered much people together, who stopped all the fountains, and the brook that ran through the midst of the land, saying, Why should the kings of Assyria come, and find much water?" (2 Chronicles xxxii. 4).

THE BABYLONIANS, according to Herodotus (Book i. c. 197), had no physicians, but were content to let the sick of their nation be carried into the market place, to be there advised of cure by those who had had experience of like ailments. "And," says he, "the

people are not allowed to pass by a sick person in silence without inquiring into the nature of his distemper."

But coincident with this neglect of physic proper among the Babylonians was the attention given by them, as by other nations, to magic and divination—the confrères of medicine in early times. Notice of this is taken by Ezekiel. "The king of Babylon," says he (Ezekiel xxi. 21), "stood at the parting of the way, at the head of the two ways, to use divination; he shook the arrows to and fro, he consulted the teraphim, he looked in the liver."

THE EGYPTIANS, on the other hand, so precocious in many things, had acquired a knowledge of medicine at an early date. Their priests knew more of our art than any of their contemporaries. They had even advanced to specialism in the treatment of disease. "The art of medicine," says Herodotus (Book ii. c. 84), is so practised in "Egypt, that there is found an individual healer for each individual ail. Hence the whole land is full of healers. Some take charge of disorders of the eyes, others those of the head, others those of the teeth, others those of the abdomen, and others internal diseases." Whether this specialism arose from scientific or from magical considerations we have no means of knowing. Certainly the Egyptians placed each of the limbs and organs of the body under the care of a god, and the priest-physician specialist of the part may have been accredited with possessing some peculiar influence with the corresponding deity. However this may be, we have in Egyptian therapeutics "an interesting combination of practical and magical remedies. The practical recipe might contain nitre, or cedar chips, or deerhorn, or various other ingredients administered in ointments or drunk in beer, but with this the magical formula was also required to deal with the demon cause of the ailment. Thus, an emetic was given with the following formula,—'O Demon, who art lodged in M., the son of N! Thou whose father is headsmiter, whose name is death, whose name is cursed for ever, etc.'—(*Encycl. Brit.*, 9th ed., art. "Magic.")

But, specialist or not, the Egyptian physician was bound to observe the laws written in the six sacred books of Tot. "He is not allowed," says Aristotle (*Politics*, Book iii. c. 15), to alter the "mode of cure prescribed for him by law until after the fourth day"—unless, of course, he does it at his own risk. The Egyptian practitioner must, accordingly, have been very much hampered by those laws. Yet the observance of them would at least protect him from punishment, if the recovery of his patient did not follow the treatment he used. So that after all he could not very well complain. For in those days reward by result was pre-eminently the custom,—a practice which must have had a salutary effect in checking medical heterodoxy then, and need not be altogether discarded now.

But the influence of Egypt on the civilisation of the surrounding nations was far reaching. As her intercourse with the Hellenes became pretty close, these prohibitory Egyptian laws



would become known in Greece. To this familiarity with the learning of the Nile priests it may not be out of reason to attribute the existence of those laws of the Asclepiadæ which enjoin caution in the undertaking and treatment of dangerous illnesses. Others of these laws were no doubt etiquettical, like the similar but unwritten observances of our times. While yet a third set, interdicting the sale and administration of poison, was clearly directed against the irregular practitioners of the day, "particularly the agurtæ, itinerant mountebanks or pedlar priests, as Plato calls them, who went about imposing on the unwary, and cheating them by lying prophecies" (Watson, *Medical Profession in Ancient Times*, p. 43).

Before taking leave of the Egyptians, we may note that their skill in surgery can hardly have been in keeping with their reputed knowledge of medicine. For although they had in use drugs—nitre, to wit, and the sea-onion steeped in vinegar (our *Acet. scillæ*)—whose medicinal activity warrants their retention in our pharmacopœias, there has been no discovery of any surgical instrument dating from ancient Egypt.

PERSIA of old appears, like Assyria, Babylonia, and other Eastern States, to have had no native doctors, if we except the Magi with their very restricted medical knowledge. Persia was, therefore, dependent for medical aid on foreigners. The Persians of those days, however, were very ready to adopt foreign manners (Herodotus, Book i. c. 135), and to profit by foreign assistance. So we read that Cyrus, the Persian, sent to Amasis for "the best oculist in Egypt," and Egyptian physicians must have thereafter, at least, if not previously, practised in Persia; for when a few years later Darius dislocated his ankle, it was the Egyptian doctors of his household who were called in. "But they by twisting the foot and using force made the evil worse; and from the pain which he felt, Darius lay seven days and seven nights without sleep" (Herodotus, Book iii. c. 129). On the eighth day, however, Democedes, the Crotonian, was brought from prison to attend the king, and he, "by using Grecian medicines and applying lenitives," procured Darius sleep, "and in a little time restored him to health" (*Ibid.* c. 130). Perchance the specialist who took charge of dislocated ankles may not have been present at the Persian Court. Or possibly the Greek, from his acquaintance with the accidents of the Palestræ, may have had more experience of surgery. For though Democedes' lack of instruments at Ægina is a matter of history, and we can hardly suppose him to have had his professional armamentarium with him in a Persian prison, he must have been a better surgeon without his instruments than the Egyptians who had never possessed any. This success of Grecian surgery, followed as it was by Democedes curing a tumour of the breast of Atossa, wife of Darius, led to the appearance at the Persian court of Greek physicians, among whom we find Apolonides of Cos and Ctesias of Cnidos.



Although ignorant of medicine as a practical art, the ancient Persians have been credited with some knowledge of anatomy, on the strength of the story which Herodotus tells of Cambyses, the son of Cyrus. According to that account Cambyses, who had been from birth a sufferer from the sacred disease (epilepsy), developed an attack of mania. While in that state he learned that the Persians doubted his mental stability. To prove his sanity he, madman-like, challenged his own ability to send an arrow into the heart of his youthful cupbearer then standing at some distance apart; for in this way his perverted reasoning sought to make the accuracy of his archery a test of the soundness of his mind. When the boy fell, the examination ordered by the king revealed the arrow fixed in his heart.

THAT AMONG THE HEBREWS there were physicians we may gather from the frequent references to them in Scripture. Likely enough they were priests as well. In which case this would not be the only custom or belief that the Jews had brought with them out of the land of Egypt. Moses himself being learned in all the learning of the Egyptians—no ignoble training truly—must have possessed some acquaintance with physic in addition to his sanitary attainments. Certainly Elijah and Elisha combined the office of healer with those of priest and prophet. If this union of offices held good throughout the land, we might argue, from the frequent mention of false prophets in Scripture, that Palestine in those days must have been a rich pasture for quacks, did we not remember that, then as now, good physic may be associated with bad theology, and *vice versa*.

AMONG THE EARLY GREEKS a knowledge of medicine had the honour of being regarded as one of the accomplishments of its greatest heroes. Achilles and Machaon are specially referred to in the *Iliad* as surgeons, and Æsculapius is half a god. Through them the Greeks traced medicine back to the gods, as through others they traced other arts back to divine origin. It is odd, however, to note, as Celsus does, in connexion with Homer's account of Podalirius and Machaon, that though they were regularly employed in extracting darts and healing wounds, they were not consulted during the plague in the Grecian camp. The treatment for that consisted in an appeal to the gods. A god-sent illness had to be met by a god-sent cure!

But it is in the early schools of philosophy, and more especially in the Asclepia (which were temple, hospital, and medical college in one), that we find the first beginnings of true medical knowledge among the Greeks. Democedes, the curer of Darius's ankle, belonged to the school of Pythagoras, and therefore flourished a century before Hippocrates, who was himself an Æsclepiad of the temple of Cos. It is not my purpose in this brief sketch to trace in detail the history of medicine, or I should now feel called upon to deal with the views of the rival schools of Cos and Cnidos. Suffice it to say, that they were both entirely orthodox, and that while the Coans looked

chiefly to constitutional conditions or states of the system, the Cnidians devoted their attention to particular diseases. But beside these rivals, heterodoxy had already reared its head. Some of the self-imposed laws of the *Æsclepiadæ*, as I have before shown, were directed against this. Of the quackery of his time Hippocrates, while lamenting the ignorance of practitioners, says:—"The mistake appears to me to arise principally from this; that in the cities there is no punishment connected with the practice of medicine, and with it alone, except disgrace, and that does not hurt those who are familiar with it. . . . So also physicians are many in title, but very few in reality."

Shortly after this time we read of one Petronas who treated fever patients by overloading them with clothes, so as to increase their heat and thirst,—a practice of the *similia similibus curantur* type, which should commend itself to a later-day sect.

Nor is it my purpose to follow the fortunes of medicine among the brilliant writers and teachers of the *Alexandrian School*. Volumes might be written on Herophilus or Erasistratus, on Serapion or the Apollonii, or on Heraclides of Tarentum. But wishing, as I do now, rather to emphasize the quackery of medicine, shall I not rather point to Pamphilus, who describes how amulets, charms, and incantations may be made to increase the medicinal efficacy of herbs? And shall I not rather call attention to the anticipation by the Alexandrian doctors of the ceremony of the royal touch—a courtly flattery offered by them to the Emperor Vespasian? About this time also appeared the mithridaticum, a confection which enjoyed a generous recognition in olden times as an antidote against poison. This compound, which owed its name and reputed virtues to Mithridates, king of Pontus, a royal dabbler in pharmacy, was believed to have enabled him to escape the effects of poison. As it consisted of twenty leaves of rue, a few grains of salt, two walnuts, and a couple of dried figs, taken in the morning fasting and followed by a draught of wine, it had at least the virtue of comparative harmlessness.

AMONG THE EARLY ROMANS medicine was in a very backward state. In nothing do we see this better than in the means adopted for treating the epidemics which from time to time visited the city. These ailments were fevers of a severe and fatal type, due apparently to the malaria of the Roman marshes. But being ascribed to the anger of the gods, these inflictions were naturally treated by superstitious rites. So the people performed the ceremony of the lectisternium, which consisted of laying out the statues of certain gods and feasting them. They consulted these dreaded oracles the Sibylline books, from which they learned that the worship of *Æsculapius* must now be removed to Rome,—and nothing too soon, one should think. On one occasion, in their dire need, they even had recourse to the ancient custom of driving a nail into the wall of a temple. But all without avail, for the

fever continued. Then Martius Curtius, a noble Roman youth, propitiated the gods' manes, and saved his country by leaping, armed and horsed, into the yawning pit which had opened in the Forum, and which, we are told, immediately closed over this living sacrifice.

Yet, in spite of Rome's intercourse with Greece, medicine made slow progress in the Italian capital. Even so late as 160-150 B.C. we find Cato the Censor (*De Re Rusticâ*, c. 160) advocating very primitive therapeutics, and employing charms to aid his surgery. For curing a luxation of the hip he advises us to split in the middle a green divining rod, four or five feet long, and to let two men hold it at the hip while singing, "*Motas vœta daries dardaries astataries dissunapiter*," until the injured parts are united. This they are to repeat daily, or if they choose they may say, "*Huat, hanat, huat ista pista sista dominabo damnaustra*," or "*Huat, haut, haut, ista sis tar sis ardannabon dunnaustra*."

Within the next century, however, the advance of medicine in Rome was very rapid, and the status of the practitioner improved correspondingly. Still later, under the Empire, the profession as a whole received important privileges and exemptions, and many of its members rose to rank and opulence. But success provoked imposition, and so the profession became crowded with men of gross ignorance and great presumption. The existence of these charlatans and the wrangling of the rival sects of Dogmatists, Empirics, Eclectics, Methodists, Sceptics, Essenes, Gnostics, and Cabalists, soon brought medicine once more into contempt. At how little the profession of that time was estimated we gather from the contemporary satirists,—

"Quot Themison aegros autumnno occiderit uno?"

asks Juvenal of even the man who was, possibly, least a quack of all the physicians of his day. The Essenes, Gnostics, and Cabalists, of whom I have just spoken, were supporters of Christianity. But to the pure and beautiful doctrine of their professed faith they added the grossest superstitions. These Essenes believed in Æons (some sort of demons), and, like the Gnostics and Cabalists, attributed powers of a supernatural order to numbers and to words, especially when these were written on parchment or engraved on stones. These views they supported by the argument, that as words were the direct gift of God to man, the Deity was to be propitiated by signs and symbols, especially by words of the most ancient languages (*Meryon*, vol. i. p. 68). Hence, of course, the double triangle interlaced, which was supposed to indicate the symbol of the sacred name of God, was by them regarded as a figure of such miraculous power that by it, indeed, almost any cure could be performed.

From this time onwards for many a century the history of medicine is one of fanaticism, superstition, or imposture. Now



and again, no doubt, we see an Asclepiades, a Celsus, or a Galen trying to light the darkness, but the lamp they burn merely makes the surrounding blackness more profound. Time is not given me now to trace, in detail, the various superstitions which prevailed during these centuries. Were it otherwise, one could afford you some interesting information on the first beginnings in ancient times of the pet quackeries of our own day. Let me, however, say a word or two on this subject. Some time ago metallic tractors and magnetic appliances were all the rage. Well, Aëtius in the fifth century reports that "they say that those afflicted with gout in the hands or feet, or with convulsions, have their pains settled by holding a magnet in their hands" (*Meryon*, vol. i. p. 102). We know what homœopathy was and is. Yet Pope Gregory I. tells us that "the manner of medicine is such that cure follows the administration sometimes of like substances, sometimes of unlike" (*Ibid.*, p. 114).

Nor do I intend to trace the progress of medicine either among the Saracens—to whom we owe the beginnings of chemistry—or later among the Schoolmen. Suffice it to add that, as my purpose to-day has been rather to deal with quackery, I shall pass over all intermediates, and come now to Paracelsus, with whom I shall close the historical part of this lecture. This wonderful man, born near Zurich in the year 1493, has been by his own and by all succeeding ages regarded as the type of a quack. His real name was Philippus Aureolus Theophrastus Bombastus von Hohenheim, but this, in accordance with the custom of his time, he discarded in favour of the shorter title of Paracelsus. His life was exceedingly stormy and troubled. The son of a practitioner of medicine, he spent his earlier years, according to Sprengel, in the company of conjurors, magicians, and alchemists, and his youth in the society of quacks, crones, and gipsies. Thereafter he roamed about the Continent, visiting many universities, of which he asserted he was a leading ornament, but of which, unfortunately, he neglects to give the name, and returned the reputed possessor of a degree to which the records of no university testify. During these peregrinations he declares himself to have associated, not only with physicians, but with surgeons, barbers, old women, conjurors, and chemists,—an odd list, surely,—and to have extracted the profoundest knowledge from these unpromising receptacles.

On his return to Basel he was made professor of physic and surgery in the university. But this post, after a quarrel with the magistrates of Basel, he subsequently forsook in favour of his former wandering life. The chief points of his character seem to have been his intense egotism, his ignorance, and his irregular habits. As illustrative of the egotism, we have him burning the works of Galen and Avicenna in his class-room, and solemnly asserting that his own shoe-strings possessed more knowledge than these physicians, while the hairs of his beard, he said, were more

learned than all the universities and the writers therein combined. Of his ignorance we need entertain no doubt, when we find him boasting that he had not opened a book for ten years, and remember that his library consisted of nothing more scientific than a Bible, a Concordance, a New Testament, and the Commentaries of St Jerome on the Evangelists (*Sprengel*, vol. iii. p. 290).

His advertisement, as it is called, which we find in the preface to his *Paragrammi*, is a singular document. "Me, me, you shall follow," he says, "you Avicenna, you Galen, you Rhazes, you Montagnana, you Mesua! I shall not follow you; you shall follow me! You, I say, you inhabitants of Paris, you inhabitants of Montpelier, you Suevi, you Miomians, you inhabitants of Cologne, you inhabitants of Vienna,—all you whom the Rhine and the Danube nourish,—you who inhabit the islands of the sea, you also Italy, Dalmatia, Athens, you Greek, you Arabian, you Israelite—I shall not follow you, but you shall follow me," etc., etc.

From all this bombast, however, there was good to accrue. Paracelsus appears to have known something of the actions of antimony and tin as well as of mercury and of opium, for he used them liberally, and this too when these were almost unknown to his contemporaries. But it was especially by his calling attention to the neglect of chemistry that he has been of service to the world.

As to his habits, they were in singular contrast to the character of the books which constituted his library. He became at length a drunken sot, and, like most illiterate egotistic men, he was ostentatiously irreligious. One extremely impious incident is recorded of him. On that occasion, "when summoned to the bedside of a patient, he inquired if the sick person had taken anything. 'Nothing,' was the answer, 'except the body of our Lord.' 'Since then,' said he, turning on his heel, 'you have called in another physician, you do not want *my* presence.'"

I have thus reviewed briefly the condition of our art in former times, and have noted for you the earliest records of quackery. It now remains to ask your attention to the causes of the latter. Stated briefly, these seem to be the credulity of man, and man's desire for aid in sickness. To these we may add the two considerations that many men naturally revolt against all law, thus preferring heterodoxy to orthodoxy, and that quackery, to be even temporarily successful, must contain some particle of truth.

First, then, as to the credulity of man. Man has been variously defined,—now as a thinking animal, anon as the only animal who laughs. The old Greek philosopher described him as a featherless biped, a definition which, as pointed out to the definer, embraces equally well the genus homo and a trussed fowl. But for our purpose the most appropriate definition is that of Southey, which regards

him as a dupeable animal. All animals are more or less capable of being deceived. But man is especially so, owing to his being endowed with imagination. He is consequently superstitious at heart, and, until educated in the laws of Nature, attributes readily to supernatural powers what is the outcome of perfectly intelligible natural causes. This we have already seen in regard to the marsh fever of the Greeks before Troy, and in the epidemics of ancient Rome.

How the priest physicians of old magnified their office, and kept men in ignorance of what little they know of our art, we can readily imagine. With this Aristophanes, the Greek poet, deals in his comedy of *Plutus*. I shall quote you the passage as illustrative of the procedure in treatment at an asclepion. The preliminary purification of the patient, the vigil in the temple hall, the hissing of the steam from the earth, whereby the patient was by the god to be informed of the method of cure, and the appropriation of the free-will offerings by the priests, being all charmingly touched on, while the whole scene is illumined by the irreverent, practical selfishness of the servant Cario, who is the speaker. "Having bathed Plutus in the sea," says this servant, "we went to the temple of Æsculapius, and when our wafers and preparatory sacrifices were offered on the altar, and our cakes on the flame of Vulcan, we laid him on a couch, as was proper, and prepared our own mattresses. . . . When the priest had extinguished the lights, he told us to go to sleep, adding that if any of us heard the hissing we should by no means stir. We therefore all remained in bed, and made no noise. As for myself, I could not sleep, on account of the odour of a basin of savoury porridge which an old woman had at the side of her bed, and which I longed for amazingly. Being, therefore, anxious to creep near it, I raised my head, and saw the sacristan take the cakes and dried figs from the sacred table, and, going the round of the altars, put all that he could find into a bag. It occurred to me that it would be meritorious in me to follow his example, so I arose to secure the basin of porridge, fearing only that the priest might get at it before me. . . . The old woman on hearing me stretched forth her hand; but I hissed, and seized her fingers with my teeth as if I were an Æsculapian snake; then drawing back her hand again she lay down and wrapped herself up quickly . . . while I swallowed the porridge, and when full retired to rest."

That superstition should have been prevalent in the past is quite to be expected; but one is hardly prepared for the ridiculousness of Sir Kenelm Digby's remarks on the power of sympathy:<sup>1</sup>—"One would think it were a folly that one should offer to wash his hands in a well-polished silver bason wherein there is not a drop of water, yet this may be done by the reflections of the moonbeams only, which will afford it a competent

<sup>1</sup> Pettigrew, *Superstitions in Medicine and Surgery*, p. 80, et seq.



humidity to do it; but they who have tried it have found their hands after they are wiped to be much moister than usually; but this is an infallible way to take away warts from the hands if it be often used." Of a truth this demonstration of the power of sympathy is one method of "washing the hands with invisible soap in imperceptible water."

Warts, for whose cure this mummary is prescribed, are peculiarly liable to spontaneous disappearance, a characteristic which they have in common with a number of diseases whose origin is in the nervous system. Hence they offer a fertile field for the charmer. Many of these old wart specifics were specially unpleasant. One of the least so is that the wart be rubbed with a piece of meat which has been stolen from a butcher's shop and thereafter buried. As the beef rots the wart will decay. One of the many charms for the arrest of hæmorrhage was, we are told, the jasper stone, and this because of its blood-red colour. Here, of course, was an illustration of the theory of signatures, a theory which maintained that everything indicated by its external appearance or signature the medicinal virtues which it possessed. On this ground the black dot of the corolla of the euphrasia pointed to the plant as an excellent remedy for diseases of the eye. Did this theory of signatures hold good, the practice of medicine would be vastly simplified, though there might always be the difficulty of interpreting the signs. But, unfortunately, medicine is not a Persian king—the happy possessor of a royal road.

Indeed, it would appear as if the efficacy of these old charms and cures depended on the difficulty experienced in applying them. The more unpleasant they were, and the more repulsive their ingredients, the greater apparently was their potency. At least we cannot help thinking this, when we find in the composition of these specifics, toads, vipers, wasps, spiders, scorpions, newts, halters of malefactors, and moss from dead men's skulls. Of these the toad was found very efficacious. It formed a charming styptic, and certainly if its action was owing to the production of nausea, it may not have been altogether inert. Living or dead, the toad stopped bleeding at the nose when applied to the nape of the bleeder's neck. Pounded up in powder (Bates' *Pharmacopœia* gives the formula under Pulvis Æthiopicus) it was given internally and applied externally for dropsy, for smallpox, and for other diseases. In fact, the toad was about as omnipotent as a later-day patent pill. Yet it might fail after all, and then the medicine man (one cannot call him a doctor) would have to try something else. For instance, it might not cure the sting of a scorpion, in which case the patient could be made to seat himself on the back of an ass with his face to the tail; for Pierius tells us that in that position the pain will be transmitted from the man to the beast.

But however pleasant it may have been to cure disease by such wonderful nostrums as the above, it was surely more to the point



to prevent it. This our forefathers believed they could do by the use of amulets. These, as the name indicates, were things *suspended*, generally round the neck, like the camphor-lockets of the present day, and were, therapeutically, about as efficacious. In their nature they varied infinitely. Now, the amulet was a gem, then a shell, a coin, a piece of coral, a portion of the metals, a lump of clay, a bunch of feathers, rags,—in fact, anything whatever, and the more out of the way the better. Scraps of parchment covered with writing were favourite amulets. To this class belong the

ABRACADABRA  
BRACADABR  
RACADAB  
ACADA  
CAD  
A

charms, whose virtue chiefly lay in the arrangement of the letters.

But whatever it may have been in former ages, we should hardly expect superstition to be very rampant in our days. Yet do the following prescriptions, given a few months ago by a certificated midwife practising in one of the Western Hebrides, differ materially from the nonsense of 200 years ago? “If the baby,” says she, “is ill and not thriving, take a cat by the four feet, swing it round the infant several times, then throw it out of the hole in the roof for letting out the smoke; if it is a black cat, or if the house has a chimney, then throw the cat out of the window. If the cat dies the child will live, because the witches or brownies have left the child and gone into the cat. If the cat does not die, then the child will.” The other recipe, which is for older children, is simpler of execution:—“Take a piece of gold and put it into a dish, pour water on to the gold, then sprinkle the water over the children that are sick, and immediately they will begin to recover” (*Christian Leader*, June 1888). I fear that little of the gold would get into the water, and less into the children. But the story reminds us of the ancient belief, that “gold is a specific against all diseases of the heart, because in the mystic scale it is in harmony with that viscus.” Those who understand these matters tell us it has not quite lost that harmony yet.

Another reason for the easy dupeability of man is the tendency to self-deception. Especially it is so when “the wish is father to the thought.” Thus can we account for cures by faith. For physiologically regarded the faith-cure is due to the stimulus of imagination acting on the nerves of the affected parts. Of course the illness, which is cured by faith alone, can be of no gross physical nature, since no man by taking thought can add a cubit to his stature. But upon this principle of the imagination almost persuading the sick man to be well depends the success of the coloured water and bread pills of pharmacy, and of the globules

of homœopathy when honestly prescribed. I say *honestly prescribed*. For we find at times a reputed homœopath giving doses, which as to their quantity would gladden the heart of a hardy allopath of the old heroic school. So also upon this effect of imagination depend the medical results of many quack medicines. I should be slow to regard as fraudulent all the written testimony in favour of these nostrums. But I do deny the ability of most of the writers to refer the results obtained to the correct causes. What, may I ask, does the non-medical world know of the sudden rise or fall of the pulse or temperature, what of the sudden appearance or disappearance of the cough, the perspiration, or the critical discharge which we know to accompany "crises" in disease? How can those unskilled in the natural history of these matters be competent judges of cause and effect in regard to drugs? Is the improvement which follows the taking of any drug always the result of the drug's action? I trow not.

On the other hand, this explanation of how quack medicines act does not meet the whole case. Some, indeed, and these the best of them, are neither more nor less than ordinary aperients. Others are the illegitimate progeny of the prescriptions of our best physicians, and such may be fairly suitable for treating one special class of ails,—in which capacity they may serve their day and generation pretty well, if somewhat dearly. But this restricted use is the only legitimate one for the quack medicine. No matter how universal its pretensions, its action remains the same. It can never become a cure-all, a panacea. Often, indeed, instead of having even this restricted beneficial use, it may be positively harmful, as when used in inappropriate cases.

Of the effect of faith in curing ails we come across occasionally a touching illustration like the following:—An old woman applied to her doctor for the relief of pleurodynia, and received a prescription with the verbal direction to apply it to her breast. Sometime later she returned lauding the advice, and happy in the enjoyment of improved health. As to the prescription, it had certainly enough been "used as directed," for there it was applied to her breast, by being tied round her neck with a piece of tape. Could any charm have done more? Truly her faith had made her whole.

How much those accustomed to deal with disease appreciate the effect of the imagination, and feel honestly called on to reckon with it, the following story of Dr Weir Mitchell shows:—"I once," says he, "expressed surprise in a consultation that an aged physician, who had called me in (to see a sick child with him), should be so desirous of doing something when I as earnestly desired to wait. At last he said, 'Doctor, it is not the child I am anxious to dose, but the mother's mind.'"

This desire to have something done for the relief of sickness, which is our second factor in the maintenance of quackery, has a

powerful influence on the mind of the sick man and his anxious friends. Especially is it so in some races. And if the something done has a touch of the mysterious, so much the better still. As the late Professor Spence, in speaking of the inventors of sympathetic powders, says:—"They saw that for one 'good Hezekiah' who would meekly submit to so simple an application as a 'poultice of figs,' they would meet with a dozen Naamans 'ready to turn away in rage' if there were not 'some great thing done.'"

Moreover, it is this desire to have something done which contributes largely to afford the quack his occupation. For though "a little knowledge is a dangerous thing," the man who has no better quality than the effrontery necessary to offer himself as an adviser will in times of need be accepted. Circumstances aid in the development of quackery as of other characteristics. To parody Shakespeare's words on greatness, we may say:—

"Some men are born quacks,  
Some men grow quacks,  
And some have quackery thrust upon them."

Often, however, as in the case of Paracelsus, quackery is dependent upon the charlatan possessing information greater than his compeers, but using this information illegitimately. Not that I should counsel an explanation being given to every one of all our medical doings. There is "a time to keep silence, and a time to speak." Indeed, a little extra knowledge of natural phenomena may at times extricate one from difficulty or danger. It is told of Columbus that he once procured for his ships provisions which had hitherto been refused, by pointing to an eclipse of the moon as an evidence of the wrath of God at the conduct of the savages. No doubt the morality here was dubious, but possibly the end warranted the means.

It is a far cry from the long haired priestly fanatic and astrologer of the past to the patent-medicine gentleman of the Victorian era, sitting in broad cloth in his sanctum, writing cunning puffs for universal panaceas. But the methods of the two charlatans are one. Compare the latest patent medicine advertisement with the bombast of Paracelsus. Is there much to choose between the 19th century quack and his prototype of the Middle Ages? Certainly the later-day man is a little more polished as becomes his time. Perhaps, too, he has the best of it in indicating in a refined way just a little weariness at the work which his genius and discoveries have thrust upon him,—since the labour of answering the numerous letters in all languages which come to him from lands beyond the sea, could only be maintained by one whose motive power was the good of humanity and the medical regeneration of the world.

Yet in everything there is some divine spark. Nothing is

altogether bad. From our errors we learn. The heterodoxy of one generation, it is said, becomes the orthodoxy of the succeeding. Thus, out of Paracelsus's pretensions grew the study of chemistry, and from astrology sprang astronomy, while the search for the philosopher's stone disclosed the beginnings of many of the arts. In later days the absurdities of homœopathy have led to the revival of the sadly-neglected study of dietetics.

How medicine at one time fraternized with astrology we may guess from the influence which the stars still exert on the nomenclature of disease and drugs. Do we not speak still of lunacy and lunar caustic, of mercury and saturnine palsy? How essential it was for the Middle-Age physician to be versed in the stars, we learn from the

“For he was groundit in astronomie”

of Chaucer's sharply lined, but not altogether too flattering picture of the “doctor of physik” in his Prologue to the *Canterbury Tales*.

The training for the practice of medicine has been much removed in different times and circumstances from the scientific method now in vogue. Among some peoples the requirements have chiefly consisted in the acquisition of long hair, a gaudy dress, and a guttural grunt. Possessed of these and of plenty of self-confidence, and adopting the solemnity of an owl, and the utterance of an oracle, the medicine man was complete as to outfit and education. Among other nations, for example among some of the Indian tribes of North America, the education was similarly scanty, but the initiation to the doctorship was by ordeal, and a revolting process it was.

How the preparation went at Salerno in the early Middle Ages let Longfellow's scholar tell:—

“*Second Scholar.*

And what are the studies you pursue?  
What is the course you here go through?

*First Scholar.*

The first three years of the college course  
Are given to Logic alone as the source  
Of all that is noble, and wise, and true.

*Second Scholar.*

That seems rather strange, I must confess,  
In a medical school; yet, nevertheless,  
You doubtless have reasons for that.

*First Scholar.*

Oh, yes!

For none but a clever dialectician  
Can hope to become a great physician;  
That has been settled long ago.  
Logic makes an important part  
Of the mystery of the healing art;



For without it how can you hope to show  
 That nobody knows so much as you know  
 After this there are five years more  
 Devoted wholly to Medicine,  
 With lectures on Chirurgical lore,  
 And dissections of the bodies of swine  
 As likest the human form divine."

—*Golden Legend.*

This college at Salerno was the first at which, after a regular curriculum, diplomas in medicine were granted. To this course several royal personages repaired, and, what has possibly more interest for you, to it female students were admitted. As to graduation, we are told of the aspirant that "A book was then put into his hands, a ring upon his finger, and a crown of laurel upon his head, when he was dismissed with a kiss from the learned doctors" (*Meryon*, vol. i. p. 165). It is, however, not said that this programme was carried out in its entirety in the case of the female students.

Just as training has been diversified, so has treatment been. In the past our forefathers trusted much to their superstitious rites. In more recent times we have had hydropathy, acetopathy, eclectopathy, faith cures, mountain cures, homeopathy, metallic tractors, magnetic belts, mesmerism, and such like. However, as summarizing what may be said on the different ways of healing disease, let me cite you Moxon's division of the "pathies," which is into sympathy (let me do something for you), apathy (do that if you like), and antipathy (get thee, hang).

Directing now our attention to the quack himself, we find him of two kinds—the legally qualified and the legally unqualified. These have much in common. Both have the same implicit self-confidence and unblushing effrontery, the same easy assurance and elastic recoil after defeat. Both have the same quickness of wit in emergencies, and the same ability to send an arrow through the joint of an opponent's armour. Both have some knowledge of the healing art, and a great knowledge of the world. Then as the foibles of the multitude are the instrument on which the charlatan plays, he may boast himself as the seventh son of the seventh son, or perhaps as the fortunate owner of some reputed medical secret, erstwhile the possession of fanatical hermit or credulous crone. Of course his knowledge of drugs may be on a par with that of the Chinese doctor, who uses the heads, stems, and roots of plants to cure the heads, bodies, and legs respectively of his patients. Possibly he may prescribe rosemary for the improvement of memory, because his forefathers put it in their ale to keep their remembrance good when their libations were plentiful. True, he may evince a belief in the doctrine of signatures, or feel constrained to hold with Burton (*Anatomy of Melancholy*, p. 456), that "pæony doth cure epilepsy, precious stones cure most diseases, and that a spider born with one helps the ague." But what of that? Is he

not the party in opposition to medical orthodoxy, and deserving of sympathy and patronage as the ill-used victim of a powerful and unscrupulous guild?

Of the uneducated charlatan the best common example in North Britain is the bone-setter, an ignorant worthy whose study of bones is at best conducted like the practical anatomy at Salerno. But he has learned that stiffened joints require free movement, and acting on this, he often attains the end which an otherwise more skilled man misses; for the astute quack refuses to treat a case which is not likely to bring him credit, assigning as a reason, not the nature of the ailment, but the tardiness with which it has been presented to him. Of course the doctors who have seen the case have bungled it—that goes without the saying.

Little time is left me to speak of the qualified charlatan—

“A potent quack long versed in human ills,  
Who first insults the victim whom he kills,  
Whose murd’rous hand a drowsy bench protect,  
And whose most tender mercy is neglect.”

To what low level the presumably learned doctor may descend, we see in our medical brother of last generation, who, Paracelsus-like, so far forgot what little Latin he had ever known as to apply to a druggist for a supply of *Tinctura ejusdem*. That cunning phrase, he concluded, must represent a drug of some potency, for he had seen it as the second ingredient in the prescription which a physician of eminence had given to a lady of quality. It is not recorded that he got the preparation. But history does tell us that the lady, whose London adviser recommended the *Edax rerum* as the best cure for her ailment, obtained ample supplies of it from her country chemist at 7s. 6d. a bottle.

Now one word. I have tried to show you quackery in some of its aspects. Let me advise you to eschew it in all of them. Be honest in all circumstances. Be truthful. It may be difficult to confess your ignorance or therapeutic powerlessness. Yet do this if occasion demand it, though not rashly or ill-advisedly. If you have learned your art well that confession will be but an acknowledgment of the limit of present human knowledge and present human power. By that confession you may lose at first, may lose later, nay, may even lose almost altogether. But you will gain at last; and, what is beyond all price, you will retain for yourselves the consciousness of honesty of purpose and honesty of deed—a consciousness which is the subjective equivalent of the highest morality, and which, with the faith of our ultra belief, completes our spiritual whole, and until that day “or ever the silver cord be loosed or the golden bowl be broken” constitutes the rock on which our true happiness here must rest.







